

**WE CLAIM:**

1. A computer program product comprising a computer program operable to control a computer to apply a plurality of anti computer virus tests to a target computer file, said computer program comprising:
  - (i) virus scanning logic operable to detect if said target computer file is infected with a computer virus;
  - (ii) virus cleaning and file repair logic operable to remove a detected computer virus from said target computer file and repair damage caused by said detected computer virus to said target computer file;
  - (iii) virus identifying logic operable to detect whether or not said detected computer virus is of a type that can cause damage to said target computer file that cannot be repaired by said virus cleaning and file repair logic; and
  - (iv) warning generating logic operable if said detected computer virus is of a type that can cause damage to said target computer file that cannot be repaired by said virus cleaning and file repair logic to generate a warning to a user that said target computer file may have suffered irreparable damage.
2. A computer program product as claimed in claim 1, wherein said virus scanning logic is responsive to a library of tests to detect different computer viruses, said library including data specifying which computer viruses can cause damage that cannot be repaired by said virus cleaning and repair logic.
3. A computer program product as claimed in claim 2, wherein said warning generating logic can generate one or more different types of warning to a user that said target computer file may have suffered irreparable damage and said library includes data specifying which of said plurality of types of warning should be issued in response to a particular detected computer virus.
4. A computer program as claimed in claim 1, wherein said warning to a user that said target computer file may have suffered irreparable damage includes an option to add a notification message into said target computer file.

5. A computer program as claimed in claim 4, wherein said notification message includes authentication data identifying said target computer file into which it was inserted.

6. A computer program as claimed in claim 4, wherein said notification message includes an electronic signature applied by said warning generating logic.

7. A computer program product as claimed in claim 1, wherein upon detection of a target computer file infected with a computer virus that may have caused irreparable damage, said virus cleaning and repair logic presents a user with different options for further processing of said target file than if said target computer file were infected with a computer virus that only causes repairable damage.

8. A method of applying a plurality of anti computer virus tests to a target computer file, said method comprising the steps of:

(i) virus scanning to detect if said target computer file is infected with a computer virus;

(ii) virus cleaning and file repairing to remove a detected computer virus from said target computer file and repair damage caused by said detected computer virus to said target computer file;

(iii) virus identifying to detect whether or not said detected computer virus is of a type that can cause damage to said target computer file that cannot be repaired by said virus cleaning and file repair logic; and

(iv) if said detected computer virus is of a type that can cause damage to said target computer file that cannot be repaired by said virus cleaning and file repair logic, generating a warning to a user that said target computer file may have suffered irreparable damage.

9. A method as claimed in claim 8, wherein said virus scanning uses a library of tests to detect different computer viruses, said library including data specifying which computer viruses can cause damage that cannot be repaired by said virus cleaning and repair logic.

10. A method as claimed in claim 9, wherein said warning generation can generate one or more different types of warning to a user that said target computer file may have suffered irreparable damage and said library includes data specifying which of said plurality of types of warning should be issued in response to a particular detected computer virus.

11. A method as claimed in claim 8, wherein said warning to a user that said target computer file may have suffered irreparable damage includes adding a notification message into said target computer file.

12. A method as claimed in claim 11, wherein said notification message includes authentication data identifying said target computer file into which it was inserted.

13. A method as claimed in claim 11, wherein said notification message includes an electronic signature applied by said warning generating logic.

14. A method as claimed in claim 8, wherein upon detection of a target computer file infected with a computer virus that may have caused irreparable damage, a user is presented with different options for further processing of said target file than if said target computer file were infected with a computer virus that only causes repairable damage.

15. Apparatus for applying a plurality of anti computer virus tests to a target computer file, said apparatus comprising:

(i) a virus scanner operable to detect if said target computer file is infected with a computer virus;

(ii) a virus cleaner and file repairer operable to remove a detected computer virus from said target computer file and repair damage caused by said detected computer virus to said target computer file;

(iii) a virus identifier operable to detect whether or not said detected computer virus is of a type that can cause damage to said target computer file that cannot be repaired by said virus cleaning and file repair logic; and

(iv) a warning generator operable if said detected computer virus is of a type that can cause damage to said target computer file that cannot be repaired by said

virus cleaning and file repair logic to generate a warning to a user that said target computer file may have suffered irreparable damage.

16. Apparatus as claimed in claim 15, wherein said virus scanner is responsive to a library of tests to detect different computer viruses, said library including data specifying which computer viruses can cause damage that cannot be repaired by said virus cleaning and repair logic.

17. Apparatus as claimed in claim 16, wherein said warning generator can generate one or more different types of warning to a user that said target computer file may have suffered irreparable damage and said library includes data specifying which of said plurality of types of warning should be issued in response to a particular detected computer virus.

18. Apparatus as claimed in claim 15, wherein said warning to a user that said target computer file may have suffered irreparable damage includes adding a notification message into said target computer file.

19. Apparatus as claimed in claim 18, wherein said notification message includes authentication data identifying said target computer file into which it was inserted.

20. Apparatus as claimed in claim 18, wherein said notification message includes an electronic signature applied by said warning generating logic.

21. Apparatus as claimed in claim 15, wherein upon detection of a target computer file infected with a computer virus that may have caused irreparable damage, said virus cleaner and repairer presents a user with different options for further processing of said target file than if said target computer file were infected with a computer virus that only causes repairable damage.